



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,794	04/25/2005	Masakazu Funahashi	28955.4026	6624
27890 7590 07/09/2008 STEP TOE & JOHNSON LLP 1330 CONNECTICUT AVENUE, N.W. WASHINGTON, DC 20036				
EXAMINER GARRETT, DAWN L				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
07/09/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/532,794

Applicant(s)

FUNAHASHI, MASAKAZU

Examiner

Dawn Garrett

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CS-100)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 4, 2008 has been entered.
2. The claim amendment filed June 4, 2008 has been entered. Claim 1 was amended. Claim 8 is canceled. Claims 1-7 are pending.
3. The Declaration under 37 CFR 1.132 filed June 4, 2008 is insufficient to overcome the rejection of claims 1-7 based upon Hosokawa et al. (EP 106112) as set forth in the last Office action because:

Applicant alleges compound A in the declaration (similar to compound 35 in EP 106112) does not emit blue light; however, compound A was shown to emit light at 480 nm. It is submitted that a wavelength of 480 nm is within the blue light emission range. See "Spectral Colors", < <http://hyperphysics.phy-astr.gsu.edu/Hbase/vision/specol.html>> which is attached to this Office action. Also, it is noted that Hosokawa teaches arylamine derivatives not requiring a styryl group as shown in compound 35 or compound A.

4. The rejection of claim 8 under 35 U.S.C. 103(a) as obvious over Hosokawa et al. (EP 1061112 or JP 2001-131541 or US 6,951,693 or US 6,743,948) is withdrawn due to the cancellation of claim 8.

5. The rejection of claim 1-7 under 35 U.S.C. 103(a) as obvious over Onikubo et al. (US 6,280,859) is withdrawn due to the amendment of claim 1, which incorporated the subject matter of former claim 8.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 is directed to "An organic electroluminescent *device* as described in claim 1"; however, claim 1 does not expressly recite or describe an organic electroluminescent device. Claim 1 is directed to a *material*. Accordingly, claim 7 is indefinite, because the metes and bounds of the claim are unclear. Clarification and/or correction are required.

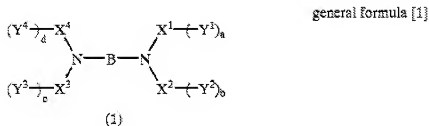
Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-7 are rejected under 35 U.S.C. 103(a) as obvious over Hosokawa et al. (EP 1061112 or JP 2001-131541 or US 6,951,693 or US 6,743,948). [Note: JP 2001-131541, US 6,951,693 and US 6,743,948 are all patent family equivalents of EP 1061112].

Hosokawa et al. discloses electroluminescent elements comprising material according to formula [1]



Y is according to formula [2] set forth by Hosokawa et al., but since a, b, c, and d may be zero, Y is not required (see abstract). See especially formula [4] of Hosokawa et al. showing the same aromatic ring group (chrysene) between the nitrogens, which is the same as required by instant claim 1. X groups may include substituted arylenes of 6 to 30 carbon atoms, which would include the at least one "A" substituent as required by claim 1 wherein if any two of instant m1, m2, m3, m4, m5, m6, m7 or m8 is 2 or greater, groups may be linked together to form a saturated or unsaturated ring (see EP claim 2). [It is noted that instant formulas (1), (14), and (18) in claim 1 comprise fused rings as substituent groups on the phenyl groups of general formulas I or II.] Hosokawa et al. clearly discloses the formulas may be used as light emitting material for organic electroluminescence devices with regard to claim 2 (see EP ref. Par. 33). It is preferred that the light emitting layer comprise 0.1-20% by weight of the formula 1 compounds with regard to claim 4 (see EP ref. paragraph 36). Hosokawa et al. further discloses an EL device with an aromatic tertiary amine or phthalocyanine derivative between the light emitting layer and the anode with regard to claims 5 and 6 (see EP ref. Par. 39). With regard to claim 7, Hosokawa et al. discloses the formation of blue light emitting devices (see examples and Tables). Hosokawa et al. does not exemplify compounds according to the instant claims; however, it would have

been obvious to one of ordinary skill in the art at the time of the invention to have formed the compounds and to have used them in a light emitting device as claimed, because Hosokawa et al. teach all the required elements of claims 1-7. With regard to the capability to emit blue light, Hosokawa et al. is considered to teach compounds within those defined by applicant and these compounds would be expected to have the same or similar light emitting properties. Recitation of a newly disclosed property does not distinguish over a reference disclosure of the article or composition claims. *General Electric v. Jewe Incandescent Lamp Co.*, 67 USPQ 155. *Titanium Metal Corp. v. Banner*, 227 USPQ 773. Applicant bears responsibility for proving that reference composition does not possess the characteristics recited in the claims. *In re Fitzgerald*, 205 USPQ 597, *In re Best*, 195 USPQ 430.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1-7 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 and 12-23 of copending Application No. 11/282,697. Although the conflicting claims are not identical, they are not patentably distinct from each other because the formula I compound of '697 claim 1 encompasses formula (I) material of the instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented. (It is noted that a notice of allowability has been mailed in the '697 application, but the patent has not yet been issued).

12. Claims 1-7 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 8-18 of copending Application No. 11/711,655. Although the conflicting claims are not identical in wording, they are not patentably distinct from each other, because the formula IV compound of '655 claim 8 encompasses formula (II) of the instant claims. Especially note compound (26) in '655 claim 18.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

13. Applicant's arguments filed June 4, 2008 have been fully considered but they are not persuasive.

With regard to the rejection over Hosokawa, applicant argues none of Hosokawa's exemplified compounds read upon applicant's claimed compounds. In response, the examiner notes that non-preferred embodiments can be indicative of obviousness (see *In re Lamberti*, 192 USPQ 278 (CCPA 1976); *In re Boe*, 148 USPQ 507 (CCPA 1976); *In re Kohler*, 177 USPQ 399

(CCPA 1973)), and a reference is not limited to working examples (see *In re Fracalossi*, 215 USPQ 569 (CCPA 1982)).

Applicant further argues the examples of the specification (p. 29-32) demonstrate a substituted compound renders better luminance and a longer life-time than comparative example 1, which comprises a non-substituted compound. The examiner submits these examples are not commensurate in scope with the breadth of the claimed compounds. Only inventive compounds 2, 5, and 11 were tested. Additionally, the comparative compound is not fully commensurate with the compounds of the closest prior art.

Applicant argues the Hosokawa compounds do not emit blue light; however, the 132 declaration submitted with the remarks suggests the Hosokawa compounds emit light at 480 nm, which is in the blue range (see attached "Spectral Colors" document, which shows the blue range of visible light). The examiner submits applicant has not established the Hosokawa compounds are not capable of emitting blue light. Also, applicant has not established unexpected, superior results commensurate in scope with the claimed compounds compared to compounds commensurate with the closest prior art.

The arguments over Onikubo are now moot in view of the withdrawal of the rejection over Onikubo in this Office action.

Applicant's arguments with regard to the double patenting rejection over app. No. 11/282,697 are unpersuasive. The examiner notes the instantly claimed compounds may comprise substituent groups on the chrysene group and accordingly, it would be obvious to form a compound with at least one substituent group on the chrysene group.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (571) 272-1523. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dawn Garrett/
Primary Examiner, Art Unit 1794